

Native American Hearing Training and Education Initiative

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Health Disparities

AI/AN Kansans:

Kansas is home to four tribal communities; located in the northeast corner of the state:

- Prairie Band Potawatomi Nation
- Iowa Tribe of Kansas and Nebraska
- Sac and Fox Nation of Missouri in Kansas and Nebraska
- Kickapoo Tribe in Kansas

These tribes are experiencing health disparities.

Health Disparity: preventable differences in the burden of disease, injury, violence, or opportunities to achieve optimal health are experienced by socially disadvantaged populations directly related to unequal distribution of social, political, economic, and environmental resources (CDC, 2015).



Barriers to Healthcare Services:

- Providers are often hours away. Two of the tribes are also located in both Kansas and Nebraska, which brings additional challenges to accessing healthcare.
- There is a lack of public knowledge of state and national Developmental Disability Network for families in Al/AN communities (Allison-Burbank & Neenan, 2017).
- Healthcare services are covered by Indian Health Services (IHS), however, there are a lack of providers who contract with IHS.
- Additional roadblocks in accessing services include poverty, drug and alcohol use, mental health, and lack of jobs in many Al/AN communities (Cohen et al., 2011).

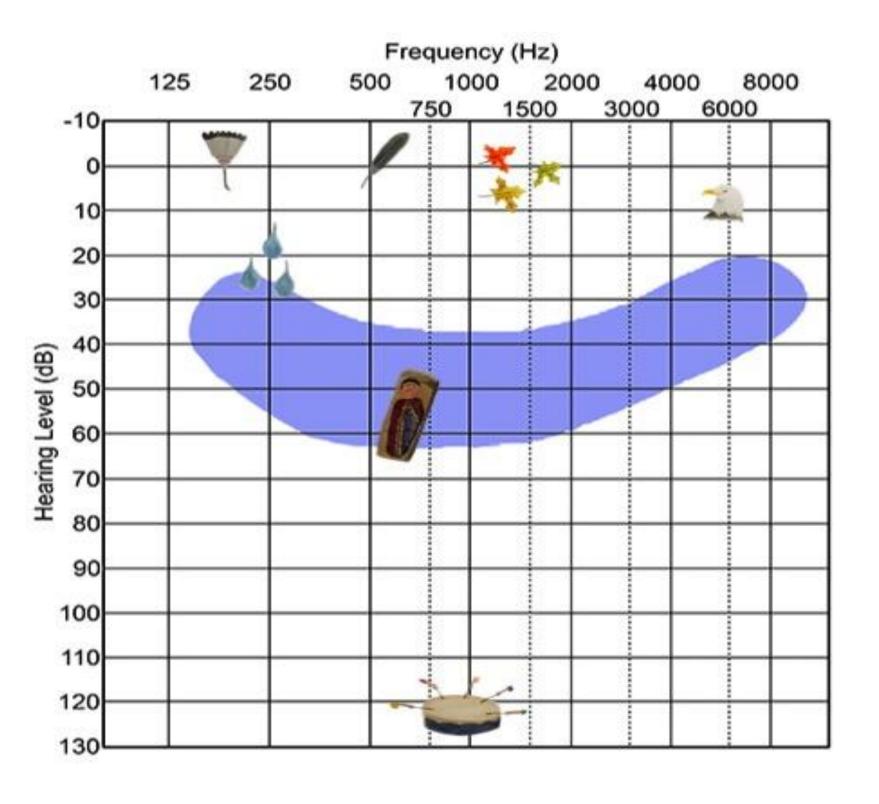
Due to these barriers, follow-up on healthcare services is often minimal or does not occur.

Community Needs Assessment:

NE Kansas Tribal Developmental Disabilities Improvement Plan (Allison-Burbank & Neenan, 2017)

- Parent advocacy needs
- Improved developmental screening procedures
- Cultural sensitivity training for educators and early intervention providers
- Community education on developmental milestones
 Recurrent ear infections and failed hearing screenings reported in early childhood program

Outreach for hearing services is one component for the ongoing improvement plan.



Risk Factors Amongst Al/AN Children

- Al/AN children, especially infants, have 3 times the amount of Otitis Media outpatient and hospitalization rates compared to US children (Curns et al., 2002).
- Al/ANs have the highest rates of disability of any racial and ethnic population in the US with 22% percent of the Al/AN population (approximately 550,000 individuals) having one or more disabilities (Cohen et al., 2011).
- The prevalence of Otitis Media is significantly higher in Al/AN children compared to Caucasian, African-American, Hispanic, and Asian counterparts (Bhutta, 2015).





These delays can result in a lack of school readiness due to speech, language and developmental delays (Allison-Burbank & Neenan, 2017).

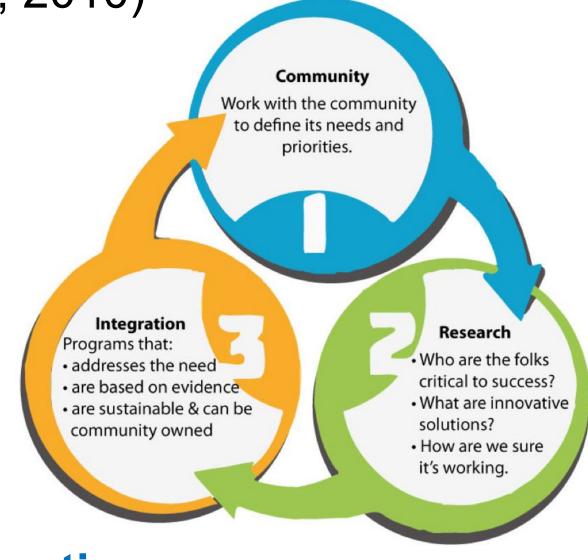
A literature review conducted revealed a variety of hypotheses as to why this population is at a higher risk for Otitis Media. Further research is needed for the etiology and risk factors.

Training and Education Initiative

Community-Based Participatory Research: collaborative approach that equally involves the tribation

collaborative approach that equally involves the tribal communities

- Builds on strengths and resources within a community
- Involves a long-term process and commitment to sustainability (Israel et. al., 1998, 2005; Minkler, 2005; Wallerstein, 2010)



Research Question:

Will the Hearing Education and Training Initiative, associated with a regional developmental disabilities improvement plan, create more sustainable hearing practices in NE KS tribal communities?

- 1.Health Promotion: Promoting hearing health starts with creating awareness by speaking at local community events.
- Prairie Band Potawatomi Research Forum (Fall 2017): focused on preventative health measures and involved the community in ongoing research
- Presented a poster on hearing health that included risk factors, treatment plans, and appropriate follow up tailored to this community



- Child Development Summit (Spring 2018): Round table discussions regarding Al/AN child development using a World Cafe Model
- Promote hearing health through discussions with Al/AN families and children
- Provide educational resources on local hearing health providers
- 2. Early Intervention Education: The goal of early intervention education is to teach parents, providers, and the wider community about birth to three early intervention services and connect people with resources to address these needs.
- Kickapoo Hearing Screenings (Summer 2017 and Spring 2018):
- Approximately 40 children were screened and a large number of them had to be referred for additional follow-up.

- Collaboration with Tribal Leaders and Council Members (Winter 2018):
 - Discussed the current lack of Infant Toddler Services in the communities and possible solutions
- Health Fair at Iowa and Potawatomi Tribes (Spring 2018):
- Provide hearing screenings to both adults and children with appropriate referral recommendations
- Utilize a culturally tailored audiogram
- Educate the community on the importance of hearing health and the impact hearing loss can have on development
- Provide resources for audiological providers in the community
- Include packets with timeline of hearing screening, diagnosis and intervention for parents





- 3. Training Providers: Creating sustainable hearing care begins with training local providers on the appropriate hearing screening techniques, including referral and follow-up protocols.
- Improve Care Coordination:
- Identify current gaps in services
- Educational training to IHS providers on appropriate screening protocols and ensuring follow-up occurs in a timely manner.
- Culturally sensitive training to audiology network:
- Informing non-IHS providers on the need for hearing services for these underserved communities.

Goal of Initiative: create more sustainable hearing practices in NE KS tribal communities.

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